

PART B APPLICATION
TSD GENERAL STATUS PERMIT
BOEING PLANT II

E.P.A. I.D. Number: WAD 009256819

Facility Contact: V. E. Norton, Manager
Facilities Engineering

Facility Location: 7755 East Marginal Way South
Seattle, Washington 98108
King County

Facility Mailing Address: Boeing Aerospace Company
P.O. Box 3999, M/S 89-13
Seattle, Washington 98124
Attention: V. E. Norton

Facility Bounds: That area west of East Marginal Way South having a westerly border along the Duwamish River and bounded by Webster Street to the north and by the Jorgensen Corporation along the south property line.

Facility S.I.C. Code: 3721 - Airplane and Aerospace Manufacture.

Site Details: The following is included or attached as part of this application:

- a. Attachment No. 1 - Topographical map of that area surrounding and including Boeing Plant II. The Plant II boundaries shown in red are representative. This map was compiled by the U.S. Geological Survey and has a scale of 1 inch equals 2,000 feet. The contour interval is twenty-five (25) feet. The last revision of this map was made in 1973.
- b. Attachment No. 2 - Monument reference point details and elevations of Plant II.
- c. Site Fencing - All operational areas of Plant II, except the 2-08 Building, are secured by continuous chain-link fencing at the site. The 2-08 Building is secured from unauthorized entry or visitation by worker surveillance. This building is not a hazardous waste area. Site access is guard controlled.
- d. Attachment No. 3 - Legal descriptions of the north and south properties of Plant II.

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TECHNICAL OPERATIONS SECTION

- e. Providing necessary personal protective equipment and instructions for its use and care.
- f. Developing and enforcing safety and health rules and requiring that employees cooperate with these rules as a condition of employment.
- g. Investigating, promptly and thoroughly, every accident or occupational illness to find what caused it and initiating action to prevent recurrence.

Disposal Staging Areas:

Spill Control

Plant II staging areas for the disposal of wastes are indicated numerically on the map (Page 7) following this section. Containment of spillage in the storage areas is maintained by providing curbing and spill retention sumps. Spillage outside of the storage area is controlled by enacting the Spill Control Plan outlined in the Hazardous Waste Management and Contingency Plan, D-180310-3, Section 8.4. This plan provides a basis for mobilizing the manpower and equipment required to control and clean up a major spill. Weekly preventive maintenance inspections are made in Areas 2, 3 and 4 (See Exhibit Nos. 3, 4 and 5). Areas 1 and 5 are under control of operating organizations and inspections in these areas are in accordance with Section 7.0 of the Hazardous Wastes and Contingency Plan. Each of the storage areas has a supply of plastic tarps and sand to be used for plugging drains and forming dykes.

All employees that are involved in handling and storage of hazardous waste receive appropriate training as outlined in D-180310-3. This training provides the employee with the knowledge of how to avoid spills and action required if a spill occurs.

Containers

Portable containers utilized include new and used 55 gallon drums with suitable liners and special reusable containers (See Attachment No. 12). The waste handlers are responsible for checking all containers to see that they are in good condition. Fixed storage tanks are inspected on a regular basis (See page 9 - Storage Area Inspections).

Area 1

The number 1 area is a shed, Building No. 2-104, used for holding drummed wastes prior to disposal shipment.

Normally, the drums are held at this staging area less than thirty (30) days. Four types of hazardous materials are stored in separate compartments. Each compartment has a separate 100-gallon containment trench. The containment will hold 10% of the maximum quantity that may be stored in the area.

Flammable materials stored consist of waste material generated in painting, cleaning and degreasing operations.

Corrosive and oxidizing materials are generated by laboratory and research and development activities, small production operations and maintenance operations.

Poisons are generated as a result of removal of semi-solid impurities and filter materials produced by cyanide plating operations.

The operation of the area is controlled by delegated personnel. Details of the storage shed are shown on the included Boeing drawing, Attachment No. 6.

Area 2

The number 2 area is a shed with inside tankage for holding waste oily liquids and free oil for disposal. The waste liquids are pumped into a tanker and hauled away by the Disposal Contractor. Two (2) movable 500 gallon tanks, additional to those fixed tanks shown on the included Boeing drawing, Attachment No. 7, are housed at this location for waste free oil storage. This oil is transported to another Boeing site for reclamation. The drawing, Attachment No. 7, is marked-up to devote operational changes. The waste oil in this area is generated by machine shops (coolants), the automotive repair shop and clean out of storm and sanitary sewer oil separators. The oil is dumped into the sump and is pumped to the holding tanks prior to pumping to the transporters truck. Spillage within the building will drain to the sump. Spillage outside of the building will drain to a sewer system oil separator. The operation of this area is the responsibility of specifically assigned personnel.

Area 3

The staging area designated by the number 3 is a tank of a 6,000 gallon nominal volume, but is limited to a maximum of 5,000 gallons for waste holding capacity. This tank is constructed of 1/4" steel plate and is lined with appropriate material for containing waste acids from manufacturing processes. The handler of waste

coordinates filling of the tank and pump out and disposal by the Disposal Contractor. Attachment No. 8 shows the arrangement of the tank and the 5,000-gallon retention basin located below the holding tank. This sump is checked on a daily basis for evidence of holding tank leakage. Accumulated rain water which drains from the dyked truck loading area is periodically pumped into the holding tank.

Area 4

Staging area number 4 contains a 3,000 gallon fiberglass tank for holding concentrated chrome waste from chrome bearing rinse waters. Details of this tank are shown on Attachment No. 9. The tank is made of acid resistant fiberglass approximately 3/8" thick. The tank is located inside of the 2-09 Bldg. and receives chromic acid wastes that are concentrated by an evaporator. The wastes are generated by ion exchangers which are used to purify contaminated rinse waters received from the anodizing process line located in the adjacent 2-10 Bldg. and waste water received from a small anodizing operation located in the 2-62 Bldg. Any leakage or spills flow to a waste holding sump located in the 2-10 Bldg. This sump also provides spill retention for the process line. The holding tank has a level controller and high level alarm and is monitored on a daily basis by operating shop personnel. The operating shop is responsible for coordinating the filling and scheduling of haul away disposal by an outside disposal contractor.

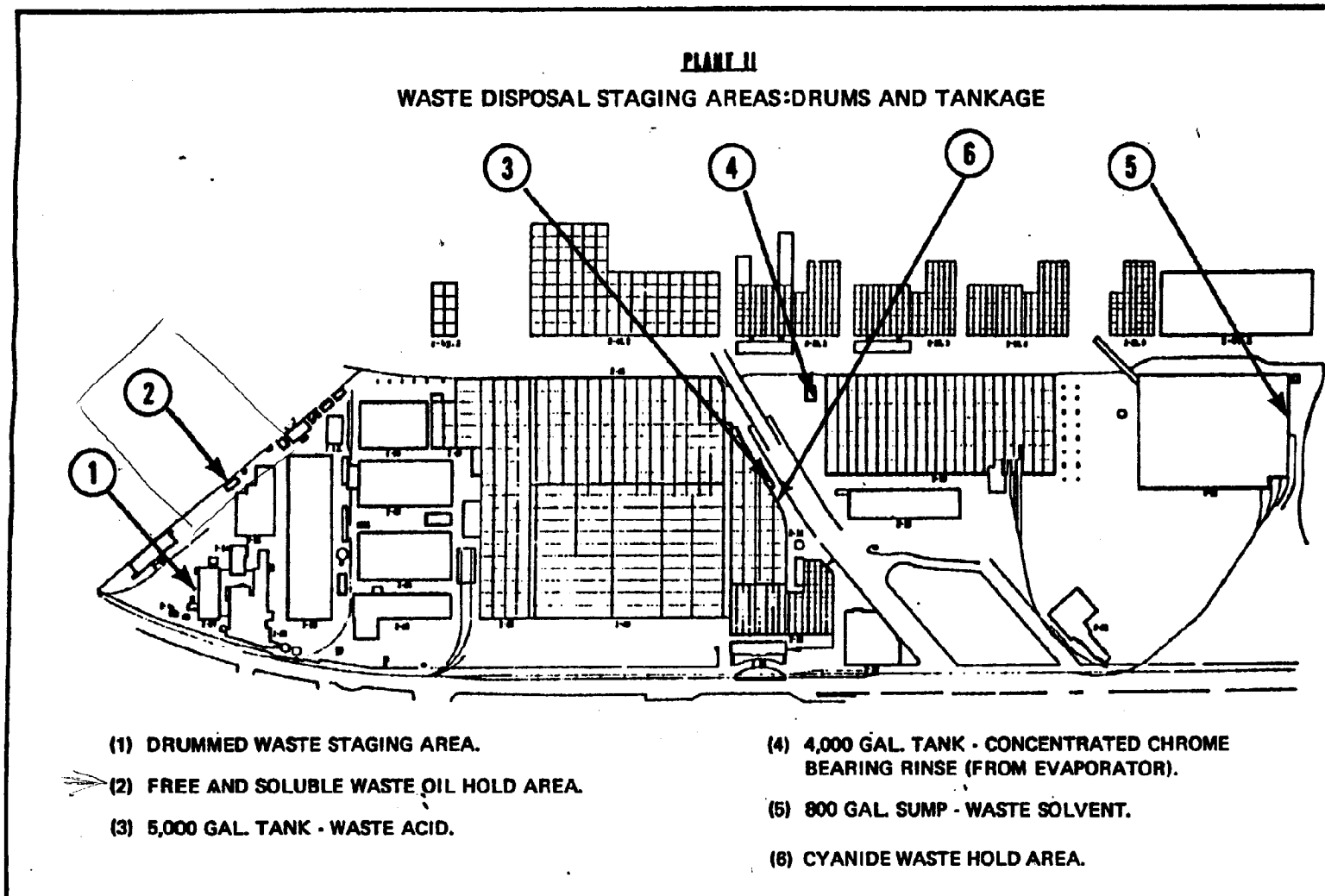
Area 5

The disposal staging area designated by the number 5 is an 800 gallon sump in the cleaning facility for aircraft landing gears. This cleaning facility is so constructed to allow solvent used in the cleaning operation to drain onto a sloped floor below grating and into the sump. The sump contents are visible to the cleaning facility personnel who initiate action for solvent disposal when the sump is observed to be full. Solvent removal is effected by pump-out to a tanker truck. Details of this facility are shown on Attachment No. 10.

The capacity of the sump is 1,000-gallons. It has a high level alarm that alerts the operating personnel. If the sump is over filled it will back up into the collection trenches. This area generates approximately 3,000-gallons of waste per year.

Area 6

The number 6 area is used for holding waste cyanide consisting of spent plating solutions from production areas and cyanide wastes from laboratory or research and development organizations. The cyanide waste is stored and transported by the disposal contractor in 375-gallon DOT approved hazardous waste containers (See Attachment No. 12). Storage is limited to maximum of four containers. These portable tanks are stored in a covered shed, on grating, directly over a 1,500-gallon capacity spill retention basin. Storage area number 2 is also utilized as a temporary holding area for semi-solid cyanide wastes that are subsequently transported to area number 1 for pick up by the disposal contractor. Small containers of liquid cyanide wastes originating in laboratory areas are also stored in area number 2. The contents of these small containers (up to 5-gallons) are dumped into the DOT containers prior to disposal.

PLANT II**WASTE DISPOSAL STAGING AREAS: DRUMS AND TANKAGE**

Waste Analysis Plan:

Material used within the company, including material that generates hazardous wastes, is specified and purchased by one of three sources; industrial standard materials, proprietary or company named materials, or company controlled materials. Industrial standard materials are known quantities by the nature of their specification; i.e., 66° Be Sulfuric Acid, etc. Proprietary or company named materials have their chemical constituents listed in a company document (Reference A - all references are listed following this section) and become known quantities. Company controlled materials are specified (Reference B) and are known quantities. These materials are then used either in industrial processes or in support activities.

Industrial processes used for manufacturing are specified in Company Engineering Process Specification Documents (Reference C), or in program unique documents; i.e., 232-XXXXX etc. type drawings. Materials that can be used in the processes are specified in these process documents, as well as their allowable concentration control limits. These limits are monitored by various analytical tests (References D and E) from their first use in the process until their final use. The concentrations and the amounts of the materials are controlled, and this control provides sufficient information on the properties of any generated waste for staging and disposal. The parameters of these materials will not be analyzed normally as the history of the materials is known and controlled accordingly. Management of any generated waste is delineated in References F, G, H and I.

Materials used in support activities and non-monitored industrial processes that generated hazardous wastes are controlled as delineated in References F, G, H and I. These materials are controlled as incoming material, in use and as to containerizing and labelling. The parameters of any generated waste are known and controlled and will not be formally analyzed.

Generators of wastes that involve these known materials are responsible for preparing DOT shipping tags including identification of the contents in accordance with the Standardized Waste List, Attachment No. 11. If the waste involves mixtures of material the generator will request that an analysis be made by the Quality Control Chem Lab.

If a material requires an analysis, control will be conducted (Reference F and H) for containment and analysis. Procedures for sampling and evaluating properties

(reactivity, corrosivity, ignitability or toxicity) will follow the established methods (Reference J). The materials will be controlled as hazardous wastes for staging and disposal.

References: (Boeing Documents)

- A. D2-9114 "Chemical Warning Label Index"
- B. D-18888-2 "Boeing Material Standards"
- C. D-18888-1 "Boeing Process Specifications"
- D. D180-17994 (Series) "Process Control Procedures"
- E. D180-25595 (Series) "Instrumental Analysis"
- F. AP 733 "Disposition of Hazardous Wastes"
- G. OP 850-075 "Operating Procedure - Hazardous Materials Management"
- H. D180-14310-3 "Hazardous Waste Management and Contingency Plan"
- I. D180-14310-1 "Pollution Control Manual"

(EPA Document)

- J. "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW-846, United States Environmental Protection Agency.

Training:

All Boeing Company employees involved with hazardous materials received training in handling hazardous wastes. The training is received within 6-months of the date on the job. Annual refresher courses are also provided. Personnel at Boeing Plant II are included in this training which is delineated in Section 6.0 and Appendix A of the "Hazardous Wastes Management and Contingency Plan Manual". Listed below are course numbers, titles, and the number of attendees as of January 5, 1982:

- 6V03.4 Hazardous Waste Mgmt - Core (Video)
Attendees - 1299
- 6372.1 Hazardous Waste Mgmt - Handlers
Attendees - 126
- 6372.2 Hazardous Waste Mgmt - Fac Services Supvrs
Attendees - 24
- 6372.3 Hazardous Waste Mgmt - Transporters; MEO's
Attendees - 93
- 6372.4 Hazardous Waste Mgmt - Quality Assurance
Personnel - Attendees - 33
- 6372.5 Hazardous Waste Mgmt - Supvr Training
Attendees - 32
- 6372.6 Hazardous Waste Mgmt - Haz. Waste Monitors
Attendees - 263
- 6372.7 Hazardous Waste Mgmt - Storage; Dispersal
Course Being Developed

7. The Boeing Company has liability insurance sufficient to cover liability requirements of 40 CFR 264.147.

Submittal Data:

A copy of the BAC Facilities "Hazardous Wastes Management and Contingency Plan Manual" is submitted with this application. Referenced documents are available for review through Boeing Aerospace Company Facilities Operations Engineering.

Disposal Staging System:

Plant II staging areas for the disposal of wastes are indicated numerically on Page 5 following this section. Pick-up of wastes by the Disposal Contractor occurs at each of these locations:

The number 1 area is a shed, Building No. 2-104, used for holding drummed wastes prior to disposal shipment. Normally, the drums are held at this staging area less than thirty (30) days. The operation of the area is controlled by delegated personnel. Details of the storage shed are shown on the included Boeing drawing, Attachment No. 6.

The number 2 area is a shed with inside tankage for holding waste oily liquids and free oil for disposal. The waste liquids are pumped into a tanker and hauled away by the Disposal Contractor. Two (2) movable 500 gallon tanks, additional to those fixed tanks shown on the included Boeing drawing, Attachment No. 7, are housed at this location for waste free oil storage. This oil is sold to a commercial oil user rather than disposal by contract. The drawing, Attachment No. 7, is marked-up to devote operational changes. The operation of this area is the responsibility of specifically assigned personnel.

The staging area designated by the number 3 is a tank of a 6,000 gallon nominal volume, but is limited to 5,000 gallons for waste holding capacity. This tank is lined with appropriate material for receiving waste acids from manufacturing processes. The handler of waste is a specifically designated and trained person from the Plant Services organization. This person coordinates the tank content disposal by the Disposal Contractor, when required. There is no drawing of this tank available, however, included is a Boeing drawing, Attachment No. 8, which depicts the sump below the tank. This sump is for containment of any spillage or leakage, if such should occur. Waste handlers monitor the tank and the immediate area for leakage or spillage and initiate corrective action, as required. *-How do you do that what controls are involved?*

Staging area number 4 contains an inside 4,000 gallon fiberglass tank for holding concentrated chrome waste from chrome bearing rinse waters. Details of this tank are shown on the included shop drawing, Attachment No. 9. Disposal of tank contents and monitoring of the tank condition are operational responsibilities of assigned personnel.

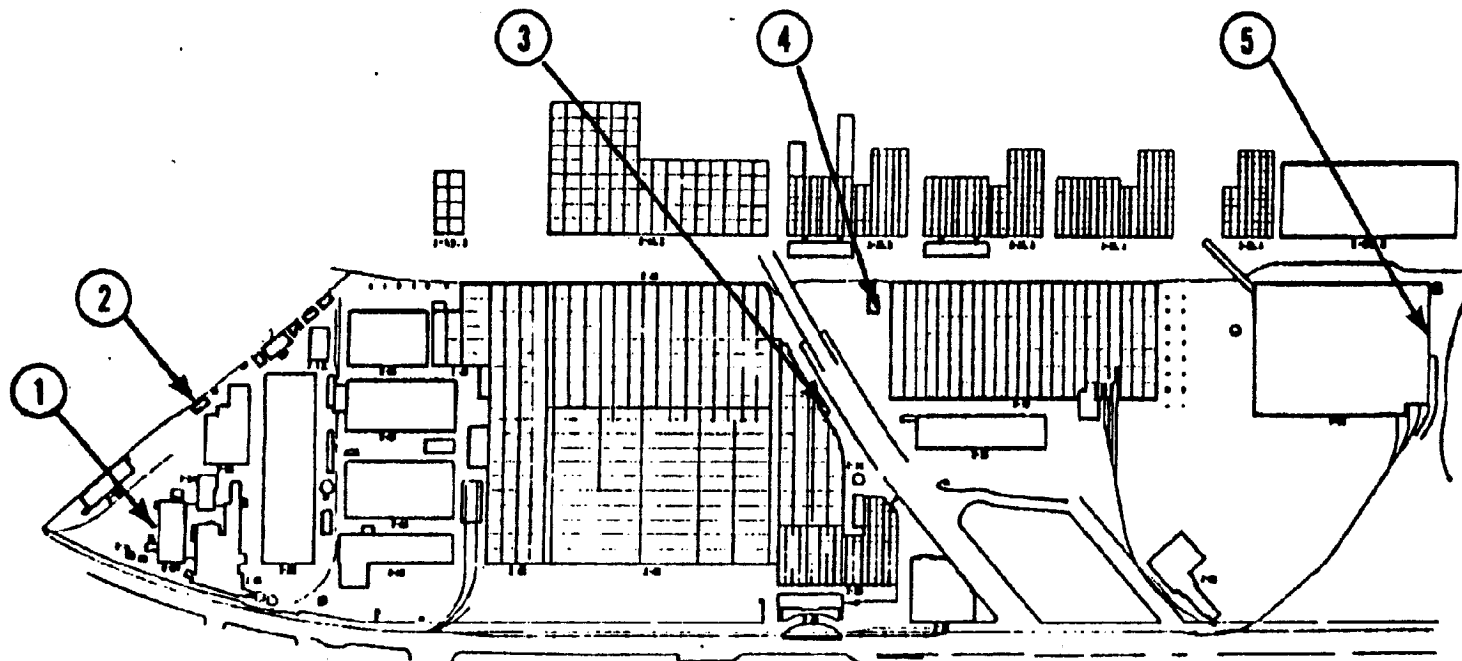
The disposal staging area designated by the number 5 is an 800 gallon sump in the cleaning facility for aircraft landing gears. This cleaning facility is so constructed to allow solvent used in the cleaning operation to drain onto a sloped floor below grating and into the sump. The sump

contents are visible to the cleaning facility personnel who initiate action for solvent disposal when the sump is observed to be full. Solvent removal is effected by pump-out to a tanker truck. Details of this facility are shown on Attachment No. 10.

Spent process solutions are removed directly from process tanks rather than thru waste staging areas. See Section 5.0 of the attached "Hazardous Wastes Management and Contingency Plan Manual". 5.1.3 page 12-13

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PLANT II
WASTE DISPOSAL STAGING AREAS: DRUMS AND TANKAGE



- (1) DRUMMED WASTE STAGING AREA.
- (2) FREE AND SOLUBLE WASTE OIL HOLD AREA.
- (3) 5,000 GAL. TANK - WASTE ACID.

- (4) 4,000 GAL. TANK - CONCENTRATED CHROME BEARING RINSE (FROM EVAPORATOR).
- (5) 800 GAL SUMP - WASTE SOLVENT.

Waste Analysis Plan:

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Industrial processes used for manufacturing are specified in Company Engineering Process Specification Documents (Reference C), or in program unique documents; i.e., 232-XXXXX etc. type drawings. Materials that can be used in the processes are specified in these process documents, as well as their allowable concentration control limits. These limits are monitored by various analytical tests (References D and E) from their first use in the process until their final use. The concentrations and the amounts of the materials are controlled, and this control provides sufficient information on the properties of any generated waste for staging and disposal. The parameters of these materials will not be analyzed normally as the history of the materials is known and controlled accordingly. Management of any generated waste is delineated in References F, G, H and I.

Materials used in support activities and non-monitored industrial processes that generated hazardous wastes are controlled as delineated in References F, G, H and I. These materials are controlled as incoming material, in use and as to containerizing and labelling. The parameters of any generated waste are known and controlled and will not be formally analyzed.

If a material requires an analysis, control will be conducted (Reference F and H) for containment and analysis. Procedures for sampling and evaluating properties (reactivity, corrosivity, ignitability or toxicity) will follow the established methods (Reference J). The materials will be controlled as hazardous wastes for staging and disposal.

References:

Boeing Documents

- | | | |
|----|---------------------|---------------------------------|
| A. | D2-9114 | "Chemical Warning Label Index" |
| B. | D-18888-2 | "Boeing Material Standards" |
| C. | D-18888-1 | "Boeing Process Specifications" |
| D. | D180-17994 (Series) | "Process Control Procedures" |

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- E. D180-25595 (Series) "Instrumental Analysis"
- F. AP 733 "Disposition of Hazardous Wastes"
- G. OP 850-075 "Operating Procedure - Hazardous Materials Management"
- H. D180-14310-3 "Hazardous Waste Management and Contingency Plan"
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EPA Document

- J. "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW-846, United States Environmental Protection Agency.

Training:

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6V03.4	Hazardous Waste Mgmt - Core (Video)
	Attendees - 1299
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	Attendees - 126
6372.2	Hazardous Waste Mgmt - Fac Services Supvrs
	Attendees - 24
6372.3	Hazardous Waste Mgmt - Transporters; MEO's
	Attendees - 93
6372.4	Hazardous Waste Mgmt - Quality Assurance
	Personnel - Attendees - 33
6372.5	Hazardous Waste Mgmt - Supvr Training
	Attendees - 32
6372.6	Hazardous Waste Mgmt - Haz. Waste Monitors
	Attendees - 263
6372.7	Hazardous Waste Mgmt - Storage; Dispersal
	Course Being Developed
6372.8	Hazardous Waste Mgmt - Safety; Ind. Hygiene
	Attendees - 2

Names of personnel and job-descriptions are on record. These are available if required.

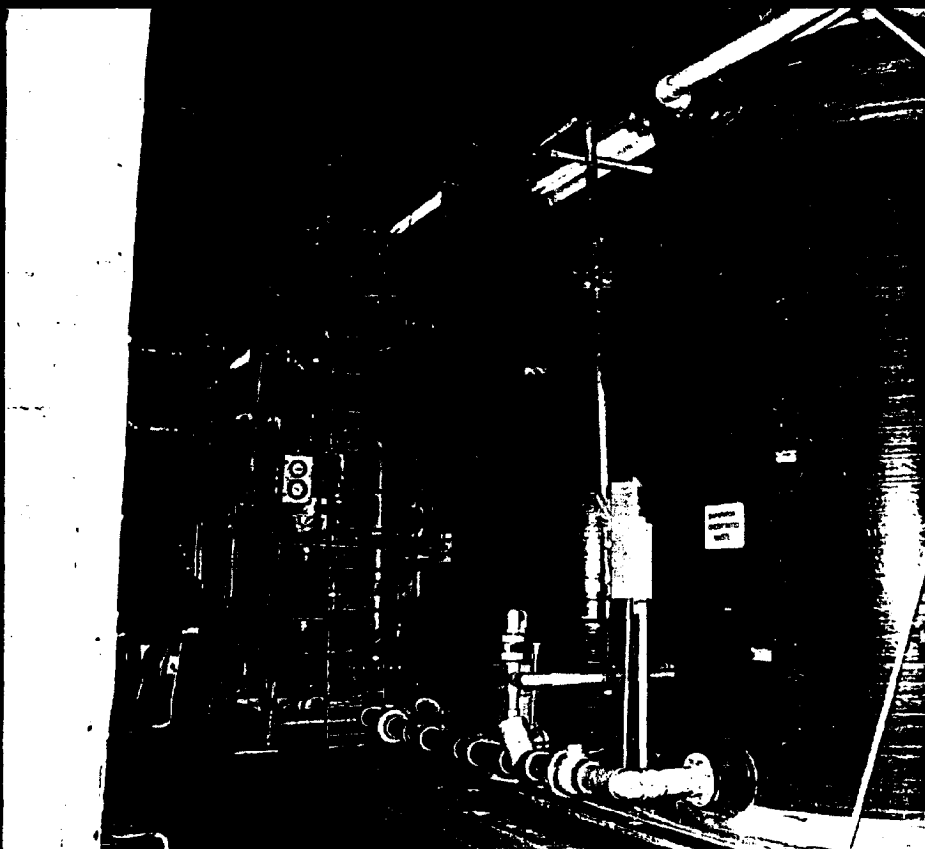
Material Storage:

Guidelines for the proper storage of hazardous materials are documented in the Boeing library of procedures and control bulletins. These documents address required precautions and compliances. Included following this page are: Industrial Hazards Control Bulletin No. 89, (Exhibit No. 1) "Guide for Storage of Hazardous Materials" and Operating Procedure No. 850-060, (Exhibit No. 2) "Flammable Liquid Storage and the Precautions".

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Attachment # 8
Storage Area # 3



Attachment # 9
Storage Area # 4

SCL 05964

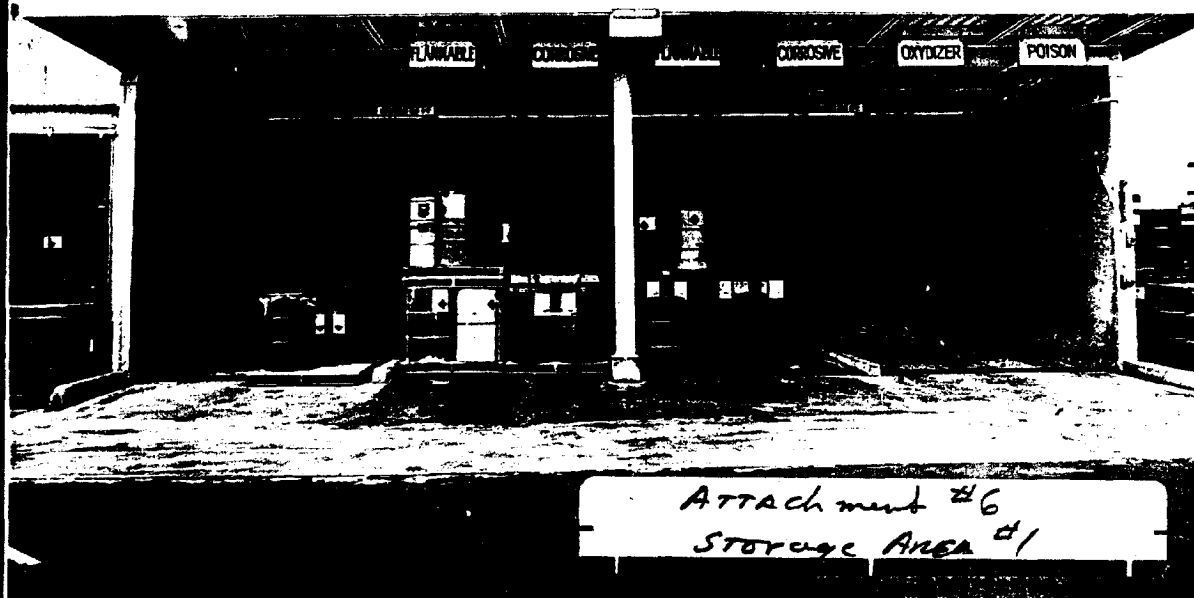
Attachment #10
Storage Area #5

Attachment #12
Storage Area #6

DOT-E 8784

DOT-E 8784

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Attachment #6
Storage Area #1



Attachment #7
Storage Area #2

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